



IN THE CLAIMS

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Please amend the claims as follows:

Claim 1 (Previously Presented): A noncontact type signal transmission device comprising:

a first member;

a second member configured to move along a predetermined orbit with respect to said first member;

at least one light-emitting device mounted on one of said first and second members;

at least one light-receiving device mounted on the other of said first and second members; and

at least one beam condensing device disposed between said light-emitting device and said light-receiving device and having a function of condensing light from said light-emitting device in a direction substantially parallel to a rotation axis of said second member.

Claim 2 (Original): A device according to claim 1, wherein said beam condensing device is mounted on the other of said first and second members or said light-receiving device.

Claim 3 (Currently Amended): A device according to claim 1, wherein said beam condensing device is mounted on one of said first and second members or said light-receiving device.

Claim 4 (Original): A device according to claim 1, wherein said beam condensing device is disposed at a position closer to said light-emitting device than to said light-receiving device.

Claim 5 (Original): A device according to claim 1, wherein the light condensed by said beam condensing device strikes said light-receiving device within a width substantially equal to a width of an effective light-receiving surface of said light-receiving device.

Claim 6 (Original): A device according to claim 1, wherein the light condensed by said beam condensing device strikes said light-receiving device within a width substantially larger than a width of an effective light-receiving surface of said light-receiving device.

Claim 7 (Original): A device according to claim 1, wherein said light-receiving device is disposed at a position closer to said beam condensing device than a position to which the light is made to converge by said beam condensing device.

Claim 8 (Original): A device according to claim 1, wherein said light-receiving device is disposed at a position farther from said beam condensing device than a position to which the light is made to converge by said beam condensing device.

Claim 9 (Original): A device according to claim 1, wherein said beam condensing device is a cylindrical lens, Fresnel lens, or curved mirror.

Claim 10 (Original): A device according to claim 1, wherein said beam condensing device does not have a function of condensing light from said light-emitting device in a direction substantially parallel to the orbit.

Claim 11 (Currently Amended): A device according to claim 1, wherein said beam condensing ~~means~~ device has a function of diffusing light from said light-emitting device in a direction substantially parallel to the orbit.

Claim 12 (Original): A device according to claim 1, further comprising:
a unit for coding a transmission signal; and
a driving unit for driving said light-emitting device in accordance with the coded transmission signal to turn on/off said light-emitting device in accordance with the coded transmission signal.

Claim 13 (Original): A device according to claim 1, wherein said light-emitting device comprises a plurality of light-emitting devices, and said device further comprises a unit for coding a transmission signal, a distributor for distributing the coded transmission signal to obtain a plurality of transmission signals, and a plurality of driving units for driving said plurality of light-emitting devices in accordance with the plurality of transmission signals.

Claim 14 (Currently Amended): An X-ray computed tomography apparatus comprising:

an X-ray tube for irradiating an object with X-rays;

a detector for detecting X-rays transmitted through the object;

a noncontact type signal transmission device for transmitting a signal output from said detector;

a unit for generating image data on the basis of the signal transmitted through said noncontact type signal transmission device; and

a unit for displaying the image data,

wherein said noncontact type signal transmission device comprises:

a stationary portion;

a rotating ring disposed inside said stationary portion;

a plurality of light-emitting devices discretely arranged on an outer surface of said rotating ring;

a plurality of light-receiving devices discretely arranged on an inner surface of said stationary portion; and

a plurality of beam condensing devices arranged between said light-emitting devices and said light-receiving devices and having the function of condensing light in a direction parallel to a rotation axis of the [[said]] rotating ring.

Claim 15 (Previously Presented): A noncontact type signal transmission device comprising:

a first member;

a second member configured to move along a predetermined orbit with respect to said first member;

at least one light-emitting device mounted on one of said first and second members;

at least one light-receiving device mounted on the other of said first and second members; and

at least one beam condensing device disposed between said light-emitting device and said light-receiving device and having a function of condensing light from said light-emitting device in a direction substantially parallel to a rotation axis of said second member,

wherein said beam condensing device is located to condense the light from said light-emitting device onto a position between said beam condensing device and said light receiving device.

Claim 16 (Previously Presented): A noncontact type signal transmission device comprising:

a first member;

a second member configured to move along a predetermined orbit with respect to said first member;

at least one light-emitting device mounted on one of said first and second members;

at least one light-receiving device mounted on the other of said first and second members; and

at least one beam condensing device disposed between said light-emitting device and said light-receiving device and having a function of condensing light from said light-emitting device in a direction substantially parallel to a rotation axis of said second member,

wherein said beam condensing device is located to condense the light from said light-emitting device onto a position which is located further than said light receiving device with respect to said beam condensing device.